Unnamed FPS

Game Design Document (lol)
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Contents

General information

My first serious attempt at a presentable, playable game (a single player fps) so it goes without saying that this "design document" won't be made with any standard or whatever like that in mind. It's more of a place for me to write down concepts to not forget them later on, keep them sorted and to be able to reference it in future should I want to continue on with game development. Long story short **I USE THIS GAME AND EVERYTHING SURRONDING IT AS A TOOL TO LEARN MORE THAN ANYTHING ELSE!**

That being said the game will be based on the quick, frantic and insane shooters of late '90s and early '00s such as Doom, Quake, Unreal, Duke Nukem, Blood and some of the newer ones that follow similar principles like Dusk, Amid Evil or Ion Maiden, and if possible also sprinkling in a thing or two from Doom(2016) or Doom Eternal. Basically **MOVEMENT, MOVEMENT and MOVEMENT**, nonsensical levels (in a practical way), responsive shooting, **ALL BEING RELATIEVLY SMALL IN SCOPE – REMEMBER TO USE IT AS A TUTORIAL NOT END ALL BE ALL!**

My goals are to get a single "episode"(meaning assets will be similar across included levels) playable from end to finish (around 5 – 10 levels), levels not necessarily polished to high heavens, rather than that playable from start to finish without getting randomly lost and having kind of a continuity. **Most important for me is to get movement and shooting mechanics down as best as I can, with close second being mechanics of the monsters (so basically the core game loop).**

Game mechanics

Movement: ~~For sure I will be trying to get down classic Quake 3 Arena movement with strafe jumping and rocket jumping.~~ Actually got down a pretty good representation of **vanilla Quake 3 movement** thanks to materials referenced in Bibliography under [1], [2], [3] and [4]. First I've found the linked YouTube video, got a grasp around it, then moved on to the id Quake 3 Arena source code, decided that I won't be able to translate it to C# on Unity, checked around the video a bit more and found linked GitHub with JavaScript code in it. Translated JavaScript code best to my abilities to C#, found out it's almost working but not quite, so I dug around a bit more and found the C# translation in the same repository (lol nice one). Fixed some parts of my code thanks to the found code, though I left in the "Legacy movement" (the JavaScript file has CPMA movement as "default" but the creator left the legacy air movement on the bottom of the page commented out) that I translated in the first time around. **All the credit goes to the Wiggle Wizard** as I basically only translated (already translated) the JavaScript file to C#.

Shooting: Projectile-based and basic melee both for the player and monsters, should be possible to dodge every attack for player if played well enough.

Resources: rv

Graphical assets

rv

Sound assets

rv

Weapons

3 per "faction" – chainsaw, triple-barrelled pistol, double-barrel dragon breath shotgun – grenade/rocket launcher, heavy bolter/rain aoe thing, rv - very fast "smg", chaingun, – some kind of a bfg(silence)? rv

Monsters

??? – Medium flying melee/ranged unit loosely based on a Cacodemon/Pinky from Doom(1993)

??? – A tough "miniboss" support/summoner based on original Archvile in Doom II

Levels

Mortuary
Hell-colosseum complete with a boss/miniboss and inverted crosses in the arena
rv

Story

Nothing serious planned, first of all it's basically a retro FPS, so "story lol" and it's something that I feel is more in a "polishing-up" category rather than "gameplay" category in a game of this scope.

Bibliography

Movement:

1. https://github.com/id-Software/Quake-III-Arena/blob/master/code/game/bg_pmove.c
2. https://github.com/WiggleWizard/quake3-movement-unity3d/blob/master/CPMPlayer.js
3. https://github.com/WiggleWizard/quake3-movement-unity3d/blob/master/CPMPlayer.cs
4. https://www.youtube.com/watch?v=B9mqpaUJ0-g